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FEDERAL INFORMATION

Agency Needs and Practices

GAO/GGD-88-115FS

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September 20, 1988

The Honorable Frank Annunzio
Chairman, Joint Committee on Printing
Congress of the United States

Dear Mr. Chairman:

As requested by the former Committee Chairman and you as the then Vice Chairman, we have completed a survey of federal agency information needs and practices. We collected this information through a questionnaire sent to all federal departments and 57 agencies in June 1987. The questionnaire was designed to provide (1) information the Committee needs to carry out its oversight role in federal printing and publishing management and (2) information to assist the Office of Technology Assessment (OTA) in its study entitled "Technology, Public Policy, and the Changing Nature of Federal Information Dissemination."[1] The Committee requested the OTA study at the same time it requested assistance from us. The Committee's overall objective in requesting this work was to assess the implications of evolving public printing, publishing, and information dissemination technology on the future of the Government Printing Office and public information functions of the federal government.

We sent the questionnaire to the senior information resources management (IRM) officials of all 13 Cabinet-level departments and asked them to provide one response for each major subdivision of their departments. We asked the senior IRM officials of agencies, or the agency head or other appropriate official when the agency was not required to have a senior IRM official, to provide one response for each of their agencies. We received a total of 114 responses from the civilian Cabinet-level departments, 11 responses from the Department of Defense, and 48 responses from agencies. Our

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[1]OTA's resulting report, tentatively entitled Informing the Nation: Federal Information Dissemination in an Electronic Age, is scheduled to be issued about October 1, 1988.

objective, scope, and methodology are further discussed in appendix I.

As agreed with the Committee, information in this fact sheet is limited to a compilation of department and agency questionnaire responses. We edited responses for completeness and internal consistency and contacted departments and agencies when necessary to clarify answers or obtain complete responses. However, we did not independently verify the accuracy of the responses.

Responses are summarized in appendixes II through XI by the three groups: Cabinet-level civilian department subdivisions, Department of Defense, and agencies. A glossary of terms that was included in the questionnaire is reproduced in appendix XII. Departments and agencies represented by the respondents are listed in appendix XIII. The appendixes do not include respondent-provided (1) narrative comments, (2) information on specific information products or services disseminated to the public in electronic format, and (3) copies of relevant statutes and policies and procedures. This information has been furnished separately to OTA.

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As agreed with the Committee, we plan no further distribution of this fact sheet until 10 days after the date of issuance, unless you publicly announce its contents earlier. At that time, we will send copies to interested parties and make copies available to others upon request. If we can be of further assistance, please call Larry Herrmann on 275-4412 or me on 275-8676.

Sincerely yours,

L. Nye Stevens

L. Nye Stevens
Associate Director

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ABBREVIATIONS

GPO	Government Printing Office
IRM	Information Resources Management
JCP	Joint Committee on Printing
OTA	Office Of Technology Assessment

OBJECTIVE, SCOPE, AND METHODOLOGY

The former Chairman and Vice Chairman, Joint Committee on Printing (JCP), asked us to identify (1) the current and future information needs of the government and the public and (2) services that might be provided from the Government Printing Office (GPO).[1] We were asked to include traditional information technology but to emphasize state-of-the-art information technology, such as database management, information storage, retrieval, and dissemination systems. At the same time, JCP asked the Office of Technology Assessment (OTA) to identify, analyze, and develop the key issues relevant to the future of GPO and, more generally, to the future direction of the federal government's public information technology and policy.

On the basis of discussions with JCP, our objective was specified as support of the broad OTA study. We agreed to design a questionnaire and collect and provide information on federal agency information needs and practices that could be used to satisfy the needs of both JCP and OTA. We further agreed that we would provide the questionnaire results directly to OTA but would also prepare a fact sheet transmitting the questionnaire data to JCP. Finally, it was agreed that we would document the questionnaire results but not verify information provided by the departments and agencies.

Our questionnaire survey was designed principally to collect

-- information on the agencies' present information dissemination practices and plans for use of various new information dissemination technologies,

-- department and agency assessments of service provided by GPO and other federal information disseminators,

-- department and agency positions on information policy issues and information on the extent of some electronic dissemination practices, and

-- information on agency expenditures and information products.

We met with JCP and OTA representatives several times and jointly developed several drafts of the proposed questionnaire as JCP's interests evolved and OTA's study plan was refined. When we

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[1]Information on information needs of the public is being assessed through questionnaires sent to libraries and associations. The results will be reported separately.

reached substantial agreement on the questionnaire content it was reviewed by GPO, pre-tested with federal department officials, and revised.

In June 1987 we sent a letter and the questionnaire to executive branch senior IRM officials[2] recognized by OMB in all 13 Cabinet-level departments and in 50 judgmentally selected agencies. In addition, we sent a letter and the questionnaire to heads or other appropriate officials of seven legislative, judicial, and executive branch agencies that were not subject to the provisions of the Paperwork Reduction Act. Departments and agencies represented by questionnaire respondents are listed in app. XIII.

Because the questionnaire dealt with many department and agency functions and information issues, we stressed in the transmittal letter and on the questionnaire cover that we believed information from multiple sources was necessary to develop a single consolidated response. We cited department and agency printing officers, librarians, publishers, public information officers, and advanced technology application planning groups as those we believed the senior IRM official might find beneficial to consult. To help ensure that those in the departments and agencies in the best position to provide information were asked to do so, we provided copies to associations and other groups representing several of these specialties so that group members would be aware the questionnaire had been sent and could seek to contribute to the department or agency responses.

To obtain some detail on subdivisions of Cabinet-level departments, we asked that departments provide a single response for each of their major subdivisions, such as bureaus or administrations. Civilian departments provided a total of 114 responses. The Departments of the Army, the Navy, and the Air Force each provided a single response, and the Marine Corps and seven other Department of Defense components each provided a single response. For clarity, the responses summarized in this fact sheet are presented in three major groups:

-- civilian Cabinet-level department subdivisions (114 responses);

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[2]The Paperwork Reduction Act requires that most executive branch departments and agencies designate a senior official in this capacity. The senior IRM official is to report directly to the agency head and carry out the responsibilities of the agency under the Paperwork Reduction Act. The Federal Election Commission is the one executive branch agency that we contacted that is not subject to the act.

-- Department of Defense, including the three services (11 responses); and

-- agencies (48 responses).

The following appendixes give the survey results by these major groups.

APPENDIX II

DEPARTMENT AND AGENCY CURRENT INFORMATION TYPES AND FORMATS

We asked each department and agency to identify the various types of public information that it disseminates and the format(s) it currently uses for dissemination. They were instructed to check as many boxes in each row as applied. If they did not disseminate a given type of information, they were asked to check column (a). Results are expressed as the number of total responses for each type of public information. Separate results are provided for each of the three groups.

For the following types of public information that your agency may disseminate, which of the following formats does the agency currently use for dissemination? (CHECK AS MANY BOXES IN EACH ROW AS APPLY. IF YOUR AGENCY DOES NOT DISSEMINATE THE TYPE OF INFORMATION, CHECK COLUMN (a) FOR THAT ROW.)

Civilian Cabinet-Level Department Subdivisions
N=114

TYPES OF PUBLIC INFORMATION	DO NOT DISSEMINATE THIS TYPE OF INFORMATION PRODUCT (a)	FORMATS CURRENTLY USED: PAPER (b)	MICROFILM (c)	MICROFICHE (d)	ELECTRONIC MAIL (e)	ELECTRONIC BULLETIN BOARD (f)	ELECTRONIC DATA TRANSFER (g)	MAGNETIC TAPE/DISK (h)	FLOPPY DISK (i)	VIDEODISK (j)	COMPACT OPTICAL DISK (k)	FILM (l)	VIDEOTAPE (m)	NO RESPONSE
1. Administrative reports	43	69	4	6	16	1	14	7	9			1	1	
2. Scientific and technical reports/information	42	70	9	22	7	7	17	16	10	2		9	15	
3. Pamphlets/bulletins	21	93	1	11	10	4	5	2	2	1	1	1		
4. Press releases	24	88		1	15	6	8	2	4			5	7	1
5. Directories/catalogs/bibliographies	35	78	2	12	1	2	10	10	6	1			1	
6. Manuals	41	73	1	5	1	1	4	5	6	1				
7. Contractual specifications/documents	42	72	1	2	1		2	2	6			1		
8. Professional journals/proceedings	63	49	2	5	1		3	3	1				2	
9. Decisions/opinions	61	53		1	3		3	1	3				1	
10. Rules, regulations, directives, circulars	43	71		1	10	1	3	2	7				1	
11. Laws/statutes	67	47		1			1	1	1			1	1	
12. Maps, charts, photos	53	61	1	3	2		4	3	3	2		9	4	
13. Software products	80	17		2	2		7	20	19			1	1	
14. Statistical data	29	83	6	14	9	4	20	16	22			1	2	
15. Satellite imagery/data	102	6		1			1	2				1	1	
16. Other (Specify) _____		11	2	1		2	1	1	2			1	10	92

APPENDIX II

For the following types of public information that your agency may disseminate, which of the following formats does the agency currently use for dissemination? (CHECK AS MANY BOXES IN EACH ROW AS APPLY. IF YOUR AGENCY DOES NOT DISSEMINATE THE TYPE OF INFORMATION, CHECK COLUMN (a) FOR THAT ROW.)

Department of Defense
N=11

FORMATS CURRENTLY USED

TYPES OF PUBLIC INFORMATION	DO NOT DISSEMINATE THIS TYPE OF INFORMATION PRODUCT (a)	PAPER (b)	MICROFILM (c)	MICROFICHE (d)	ELECTRONIC MAIL (e)	ELECTRONIC BULLETIN BOARD (f)	ELECTRONIC DATA TRANSFER (g)	MAGNETIC TAPE/DISK (h)	FLOPPY DISK (i)	VIDEODISK (j)	COMPACT OPTICAL DISK (k)	FILM (l)	VIDEOTAPE (m)	NO RESPONSE
1. Administrative reports	3	8	1	2	3	2	2	3	4			2	2	
2. Scientific and technical reports/information	3	8	1	4	1	1	2	2	3		1	2	2	
3. Pamphlets/bulletins		11		2	2	1	2	2	3			3	3	
4. Press releases	4	7			2	2	2	1				1	4	
5. Directories/catalogs/ bibliographies	1	10	1	4	1	1	2	3	4			1	1	
6. Manuals	1	10	1	5	1	1	2	2	4			2	1	
7. Contractual specifications/documents	2	9	1		1	1	1		3		1			
8. Professional journals/ proceedings	5	6		1	1	1	1		1		1			
9. Decisions/opinions	7	4					1		1					
10. Rules, regulations, directives, circulars	1	10		3		1	1	2	2			1	1	
11. Laws/statutes	11													
12. Maps, charts, photos	3	8	1				1	2	1			2	2	
13. Software products	2	7			1	1	3	6	7					
14. Statistical data	1	7		2	1	1	1	2	2					
15. Satellite imagery/data	11													
16. Other (Specify) _____		2										1	1	

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APPENDIX II

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For the following types of public information that your agency may disseminate, which of the following formats does the agency currently use for dissemination? (CHECK AS MANY BOXES IN EACH ROW AS APPLY. IF YOUR AGENCY DOES NOT DISSEMINATE THE TYPE OF INFORMATION, CHECK COLUMN (a) FOR THAT ROW.)

Agencies
N=48

TYPES OF PUBLIC INFORMATION	(a) DO NOT DISSEMINATE THIS TYPE OF INFORMATION PRODUCT	FORMATS CURRENTLY USED (b) PAPER	(c) MICROFILM	(d) MICROFICHE	(e) ELECTRONIC MAIL	(f) ELECTRONIC BULLETIN BOARD	(g) ELECTRONIC DATA TRANSFER	(h) MAGNETIC TAPE/DISK	(i) FLOPPY DISK	(j) VIDEODISK	(k) COMPACT OPTICAL DISK	(l) FILM	(m) VIDEOTAPE	NO RESPONSE
1. Administrative reports	6	42	2	5	6	1	7	7	9	1		1		
2. Scientific and technical reports/information	17	31	3	10	4	1	5	6	5			2	4	
3. Pamphlets/bulletins	3	45		4	3	3	3	1	2			1	2	
4. Press releases	3	45		2	3	1	3		2	1		1	2	
5. Directories/catalogs/ bibliographies	8	40	2	6	1	1	3	5	1					
6. Manuals	16	32	1	1	1		1		2					
7. Contractual specifications/documents	8	40	1	1				2	1			1		
8. Professional journals/ proceedings	22	26	1	3			1		1				1	
9. Decisions/opinions	14	34	3	10	2	1	1	1	2					
10. Rules, regulations, directives, circulars	7	41	2	6	1	2	2	1	2			1	1	
11. Laws/statutes	27	21										1		
12. Maps, charts, photos	24	23	3	3			1					3	2	1
13. Software products	36	9		1	2		3	7	7				1	
14. Statistical data	12	36	6	6	4	2	5	14	8					
15. Satellite imagery/data	45	2	1	1										1
16. Other (Specify) _____		6	2	3	1		1	2				4	4	39

APPENDIX II

APPENDIX III

DEPARTMENT AND AGENCY PLANNED INFORMATION TYPES AND FORMATS

We asked departments and agencies to check those new formats they planned to use for public information dissemination in the next 3 years. They were instructed to check as many boxes in each row as applied. If they did not plan to disseminate this type of information, they were asked to check column (a). They were not to check formats already in use (see app. II). Results are expressed as the number of total responses for each type of public information. Separate results are provided for each of the three groups.

For the following types of public information that your agency may disseminate, which of the following new formats does your agency plan to use for dissemination within the next three years? (CHECK AS MANY BOXES IN EACH ROW AS APPLY. DO NOT CHECK FORMATS ALREADY IN USE CHECKED IN THE PRECEDING QUESTION. IF YOUR AGENCY WILL NOT DISSEMINATE THIS TYPE OF INFORMATION, CHECK COLUMN (a) FOR THAT ROW.)

Civilian Cabinet-Level Department Subdivisions
N=114

TYPES OF PUBLIC INFORMATION	FORMATS PLANNED FOR USE WITHIN NEXT 3 YEARS													
	WILL NOT DISSEMINATE THIS TYPE OF INFORMATION PRODUCT	PAPER	MICROFILM	MICROFICHE	ELECTRONIC MAIL	ELECTRONIC BULLETIN BOARD	ELECTRONIC DATA TRANSFER	MAGNETIC TAPE/DISK	FLOPPY DISK	VIDEODISK	COMPACT OPTICAL DISK	FILM	VIDEOTAPE	NO RESPONSE
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	
1. Administrative reports	43		1	3	14	9	10	6	10	1	3			46
2. Scientific and technical reports/information	42		1	2	11	5	4	3	9	3	10	1	3	44
3. Pamphlets/bulletins	21		1	1	11	8	10	3	9	1	1		2	69
4. Press releases	23	1			17	8	7	2	4	1		1	3	66
5. Directories/catalogs/ bibliographies	35			1	12	7	11	3	11	3	9			48
6. Manuals	42		3	3	10	5	9	1	10	3	4			50
7. Contractual specifications/documents	42		1	1	5	3	5		5		2			57
8. Professional journals/ proceedings	64	1	1	1	4	2	2	2	1		2			42
9. Decisions/opinions	60	1	1	2	9	6	8	4	4		1		1	36
10. Rules, regulations, directives, circulars	45		3	2	11	6	9	2	7		1			49
11. Laws/statutes	67	1	1	1	4	1	1				1			41
12. Maps, charts, photos	53		2	1	5	2	4	1	4	2	3	2	1	47
13. Software products	79	1	1	1	3	2	3	1	3		2			24
14. Statistical data	29	2	1	2	14	10	8	3	14		3			53
15. Satellite imagery/data	106						1		1	1	1	1		5
16. Other (Specify) _____	1								1					112

APPENDIX III

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For the following types of public information that your agency may disseminate, which of the following new formats does your agency plan to use for dissemination within the next three years? (CHECK AS MANY BOXES IN EACH ROW AS APPLY. DO NOT CHECK FORMATS ALREADY IN USE CHECKED IN THE PRECEDING QUESTION. IF YOUR AGENCY WILL NOT DISSEMINATE THIS TYPE OF INFORMATION, CHECK COLUMN (a) FOR THAT ROW.)

Department of Defense
N=11

TYPES OF PUBLIC INFORMATION	FORMATS PLANNED FOR USE WITHIN NEXT 3 YEARS													
	WILL NOT DISSEMINATE THIS TYPE OF INFORMATION PRODUCT	PAPER	MICROFILM	MICROFICHE	ELECTRONIC MAIL	ELECTRONIC BULLETIN BOARD	ELECTRONIC DATA TRANSFER	MAGNETIC TAPE/DISK	FLOPPY DISK	VIDEODISK	COMPACT OPTICAL DISK	FILM	VIDEOTAPE	NO RESPONSE
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	
1. Administrative reports	3				1	2	2	1	1		4			2
2. Scientific and technical reports/information	3				2		1	2	1	1	2			4
3. Pamphlets/bulletins					2	3	2	1			1			6
4. Press releases	4							1	1					6
5. Directories/catalogs/ bibliographies	1				1	2	2	1	2		3			5
6. Manuals	1				1	2	2	1		2	3		1	5
7. Contractual specifications/documents	2				1		1	1						7
8. Professional journals/ proceedings	5						1							5
9. Decisions/opinions	7					1			1					3
10. Rules, regulations, directives, circulars	1				2	3	2	1		2	3			5
11. Laws/statutes	11													
12. Maps, charts, photos	3							2	1					6
13. Software products	2				2	1	1				1			6
14. Statistical data	3	1				1	2	1	1					5
15. Satellite imagery/data	11													
16. Other (Specify) _____														11

APPENDIX III

For the following types of public information that your agency may disseminate, which of the following new formats does your agency plan to use for dissemination within the next three years? (CHECK AS MANY BOXES IN EACH ROW AS APPLY. DO NOT CHECK FORMATS ALREADY IN USE CHECKED IN THE PRECEDING QUESTION. IF YOUR AGENCY WILL NOT DISSEMINATE THIS TYPE OF INFORMATION, CHECK COLUMN (a) FOR THAT ROW.)

Agencies
N = 48

TYPES OF PUBLIC INFORMATION	FORMATS PLANNED FOR USE WITHIN NEXT 3 YEARS													NO RESPONSE
	WILL NOT DISSEMINATE THIS TYPE OF INFORMATION PRODUCT (a)	PAPER (b)	MICROFILM (c)	MICROFICHE (d)	ELECTRONIC MAIL (e)	ELECTRONIC BULLETIN BOARD (f)	ELECTRONIC DATA TRANSFER (g)	MAGNETIC TAPE/DISK (h)	FLOPPY DISK (i)	VIDEODISK (j)	COMPACT OPTICAL DISK (k)	FILM (l)	VIDEOTAPE (m)	
1. Administrative reports	7		1	2	3		4		2	1				33
2. Scientific and technical reports/information	17			1	2	3	6	1	4	1	2	1		20
3. Pamphlets/bulletins	2		2	2	2	2		1	2	1			2	37
4. Press releases	3				6	3	3		1				1	35
5. Directories/catalogs/ bibliographies	8		1	2	1	1	3		2	1	3			30
6. Manuals	15	1			3	1	3	2	1					28
7. Contractual specifications/documents	10				2		1		1					35
8. Professional journals/ proceedings	21						1		1					25
9. Decisions/opinions	14	1	1		2	2	4	1	5	1	1			24
10. Rules, regulations, directives, circulars	7	1	2	1	3	4	6	3	5		2			30
11. Laws/statutes	27		1	1				1						19
12. Maps, charts, photos	24					1	1		2	1	1			21
13. Software products	34	1				1	2		1					10
14. Statistical data	13					1	3	1	3	1	2			30
15. Satellite imagery/data	45													3
16. Other (Specify) _____										1		1		46

APPENDIX III

APPENDIX IV

CURRENT INFORMATION TYPES AND DISSEMINATION SERVICES

We asked departments and agencies which of several possible dissemination services they currently use for the types of public information they disseminate. They were instructed to check as many boxes in each row as apply. If they did not disseminate a given type of information, they were asked to check column (a). Results are expressed as the number of total responses for each type of public information. Separate results are provided for each of the three groups.

For the following types of public information that your agency may disseminate, which of the following dissemination services does the agency currently use for dissemination? (CHECK AS MANY BOXES IN EACH ROW AS APPLY. IF YOUR AGENCY DOES NOT DISSEMINATE THIS TYPE OF INFORMATION, CHECK COLUMN (a) FOR THAT ROW.)

Civilian Cabinet-Level Department Subdivisions
N=114

TYPES OF PUBLIC INFORMATION	DISSEMINATION SERVICES CURRENTLY USED: (a) DO NOT DISSEMINATE THIS TYPE OF INFORMATION PRODUCT	(b) OWN AGENCY	(c) GOVERNMENT PRINTING OFFICE	(d) NATIONAL TECHNICAL INFORMATION SERVICE	(e) CONSUMER INFORMATION CENTER (PUEBLO, CO)	(f) DEPOSITORY LIBRARIES	(g) PRIVATE SECTOR VENDORS/ CONTRACTORS	(h) OTHER (SPECIFY.)	NO RESPONSE
1. Administrative reports	43	70	19	8	1	13	13	2	
2. Scientific and technical reports/information	42	67	38	36	3	36	26	10	
3. Pamphlets/bulletins	21	91	52	16	18	34	34	7	1
4. Press releases	24	89	12	4	1	3	14	5	1
5. Directories/catalogs/ bibliographies	34	76	41	18	3	28	18	6	
6. Manuals	40	66	40	16	1	19	25	3	2
7. Contractual specifications/documents	41	67	8	4		1	9	6	1
8. Professional journals/ proceedings	63	46	19	11	1	10	11	5	
9. Decisions/opinions	61	49	15	3		7	8	5	
10. Rules, regulations, directives, circulars	43	67	36	3	1	10	13	8	
11. Laws/statutes	64	45	21	2	1	11	3	4	1
12. Maps, charts, photos	54	59	19	5		8	13	3	
13. Software products	79	31	2	6		1	12		2
14. Statistical data	29	85	36	20	2	27	25	8	
15. Satellite imagery/data	108	6		1		1	1		
16. Other (Specify) _____		17	6	1		2	8	2	94

APPENDIX IV

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For the following types of public information that your agency may disseminate, which of the following dissemination services does the agency currently use for dissemination? (CHECK AS MANY BOXES IN EACH ROW AS APPLY. IF YOUR AGENCY DOES NOT DISSEMINATE THIS TYPE OF INFORMATION, CHECK COLUMN (a) FOR THAT ROW.)

Department of Defense
N=11

TYPES OF PUBLIC INFORMATION	DISSEMINATION SERVICES CURRENTLY USED								
	DO NOT DISSEMINATE THIS TYPE OF INFORMATION PRODUCT (a)	OWN AGENCY (b)	GOVERNMENT PRINTING OFFICE (c)	NATIONAL TECHNICAL INFORMATION SERVICE (d)	CONSUMER INFORMATION CENTER (PUEBLO, CO) (e)	DEPOSITORY LIBRARIES (f)	PRIVATE SECTOR VENDORS/ CONTRACTORS (g)	OTHER (SPECIFY.) (h)	NO RESPONSE
1. Administrative reports	3	8	2	1		1	1		
2. Scientific and technical reports/information	3	7	4	7	1	3	2	3	
3. Pamphlets/bulletins		10	8	3		4	3	1	
4. Press releases	4	7					1		
5. Directories/catalogs/ bibliographies	1	10	5	3		3	3		
6. Manuals	1	10	5	2		3	4		
7. Contractual specifications/documents	2	9		1			3		
8. Professional journals/ proceedings	5	6	3	1		2	1		
9. Decisions/opinions	7	4					1		
10. Rules, regulations, directives, circulars	1	10	3	2		2	2		
11. Laws/statutes	11								
12. Maps, charts, photos	3	7	2				2	1	
13. Software products	2	9		2			3		
14. Statistical data	3	8	1			1	1		
15. Satellite imagery/data	11								
16. Other (Specify) _____		2	1			1	1		8

APPENDIX IV

For the following types of public information that your agency may disseminate, which of the following dissemination services does the agency currently use for dissemination? (CHECK AS MANY BOXES IN EACH ROW AS APPLY. IF YOUR AGENCY DOES NOT DISSEMINATE THIS TYPE OF INFORMATION, CHECK COLUMN (a) FOR THAT ROW.)

Agencies
N=48

TYPES OF PUBLIC INFORMATION	DISSEMINATION SERVICES CURRENTLY USED								NO RESPONSE
	DO NOT DISSEMINATE THIS TYPE OF INFORMATION PRODUCT (a)	OWN AGENCY (b)	GOVERNMENT PRINTING OFFICE (c)	NATIONAL TECHNICAL INFORMATION SERVICE (d)	CONSUMER INFORMATION CENTER (PUEBLO, CO) (e)	DEPOSITORY LIBRARIES (f)	PRIVATE SECTOR VENDORS/ CONTRACTORS (g)	OTHER (SPECIFY.) (h)	
1. Administrative reports	6	42	20	5	1	13	8	1	
2. Scientific and technical reports/information	17	31	16	12		13	11	1	
3. Pamphlets/bulletins	2	46	20	4	9	16	13	3	
4. Press releases	3	45	5	1		3	9	2	
5. Directories/catalogs/ bibliographies	7	41	17	7	2	10	9	1	
6. Manuals	16	31	9	3		6	3	1	
7. Contractual specifications/documents	8	40	3	2			4		
8. Professional journals/ proceedings	22	23	8	3		6	7		
9. Decisions/opinions	14	33	13	3		10	13	1	
10. Rules, regulations, directives, circulars	7	40	16	1		11	11	2	
11. Laws/statutes	27	19	8	2		5	1	1	
12. Maps, charts, photos	25	22	6	4		1	5	1	1
13. Software products	36	11	1	3			4		
14. Statistical data	13	34	8	6		6	7	1	
15. Satellite imagery/data	44	1	1	1			1		3
16. Other (Specify) _____		6	1				5	1	38

APPENDIX IV

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APPENDIX V

PUBLIC INFORMATION DISSEMINATION SERVICES AND FORMATS

This appendix relates the public information dissemination services used by the departments and agencies and the formats currently used by those services. We asked the department or agency to indicate whether or not it uses a given dissemination service and, if so, the format(s) in which the information is disseminated. Results are expressed as the number of total responses for each dissemination service. Separate results are provided for each of the three groups.

For the following dissemination services that may be used by your agency to disseminate public information, which of the following formats does your agency currently use for dissemination? (CHECK AS MANY BOXES IN EACH ROW AS APPLY. IF YOUR AGENCY DOES NOT USE THIS DISSEMINATION SERVICE, CHECK COLUMN (a) FOR THAT ROW.)

Civilian Cabinet-Level Department Subdivisions
N=114

DISSEMINATION SERVICES	DO NOT USE THIS SERVICE FOR DISSEMINATION (a)	FORMATS CURRENTLY USED: PAPER (b)	MICROFILM (c)	MICROFICHE (d)	ELECTRONIC MAIL (e)	ELECTRONIC BULLETIN BOARD (f)	ELECTRONIC DATA TRANSFER (g)	MAGNETIC TAPE/DISK (h)	FLOPPY DISK (i)	VIDEODISK (j)	COMPACT OPTICAL DISK (k)	FILM (l)	VIDEOTAPE (m)	NO RESPONSE
1. Our own agency	9	105	12	21	29	10	30	46	38	4	1	18	30	
2. Government Printing Office (GPO)	40	74	2	10	1	1	1	1	3					
3. National Technical Information Service (NTIS)	71	41	8	26	1		1	10	8				1	
4. Consumer Information Center (Pueblo, CO)	94	20												
5. Depository libraries	55	58	2	14				2	1			1	1	
6. Private sector vendors/ contractors	50	54	3	8	10	3	18	17	12	1	1	7	12	1
7. Other (Specify) _____	3	25	1	1	2	1	4	1				2	3	81

APPENDIX V

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For the following dissemination services that may be used by your agency to disseminate public information, which of the following formats does your agency currently use for dissemination? (CHECK AS MANY BOXES IN EACH ROW AS APPLY. IF YOUR AGENCY DOES NOT USE THIS DISSEMINATION SERVICE, CHECK COLUMN (a) FOR THAT ROW.)

Department of Defense
N=11

DISSEMINATION SERVICES	DO NOT USE THIS SERVICE FOR DISSEMINATION (a)	FORMATS CURRENTLY USED: PAPER (b)	MICROFILM (c)	MICROFICHE (d)	ELECTRONIC MAIL (e)	ELECTRONIC BULLETIN BOARD (f)	ELECTRONIC DATA TRANSFER (g)	MAGNETIC TAPE/DISK (h)	FLOPPY DISK (i)	VIDEODISK (j)	COMPACT OPTICAL DISK (k)	FILM (l)	VIDEOTAPE (m)	NO RESPONSE
1. Our own agency		11	3	6	4	4	5	7	7		1	4	6	
2. Government Printing Office (GPO)	2	9		4				1						
3. National Technical Information Service (NTIS)	3	8	3	3		1	1	1	1					
4. Consumer Information Center (Pueblo, CO)	10	1												
5. Depository libraries	7	4		3										
6. Private sector vendors/ contractors	4	7	1	3	2	1	1	2	2			2	3	
7. Other (Specify) _____		1										1	2	8

APPENDIX V

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For the following dissemination services that may be used by your agency to disseminate public information, which of the following formats does your agency currently use for dissemination? (CHECK AS MANY BOXES IN EACH ROW AS APPLY. IF YOUR AGENCY DOES NOT USE THIS DISSEMINATION SERVICE, CHECK COLUMN (a) FOR THAT ROW.)

Agencies
N=48

DISSEMINATION SERVICES	FORMATS CURRENTLY USED: DO NOT USE THIS SERVICE FOR DISSEMINATION (a)	PAPER (b)	MICROFILM (c)	MICROFICHE (d)	ELECTRONIC MAIL (e)	ELECTRONIC BULLETIN BOARD (f)	ELECTRONIC DATA TRANSFER (g)	MAGNETIC TAPE/DISK (h)	FLOPPY DISK (i)	V'DEO DISK (j)	[illegible] OPTICAL DISK (k)	FILM (l)	VIDEOTAPE (m)	NO RESPONSE
1. Our own agency		48	11	16	13	6	11	18	13	2		10	13	
2. Government Printing Office (GPO)	9	38	1	8										1
3. National Technical Information Service (NTIS)	28	16	1	10				3						1
4. Consumer Information Center (Pueblo, CO)	35	12		1										1
5. Depository libraries	17	30	1	12								1	1	1
6. Private sector vendors/ contractors	19	29	4	13	3		4	6	4			5	8	
7. Other (Specify) _____		6		2			1							42

APPENDIX V

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APPENDIX VI

USE, PROTOTYPING, OR PILOT TESTING OF INFORMATION TECHNOLOGIES

We asked departments and agencies which of several information technologies (1) are currently in operational use and (2) are currently being prototyped or pilot-tested in their organization for a variety of information functions. The "currently prototyping or pilot testing" column was to be checked only for those technologies that are not currently in operational use.

APPENDIX VI

With respect to the collection, filing, storage, printing, and dissemination of public information, which of the following information technologies is your agency (A) currently using, or (B) currently prototyping or pilot testing? (CHECK ONE BOX FOR EACH ROW UNDER COLUMN (A) "CURRENTLY IN OPERATIONAL USE." ALSO, CHECK ONE BOX FOR EACH ROW UNDER COLUMN (B) "CURRENTLY PROTOTYPING OR PILOT TESTING" FOR THOSE TECHNOLOGIES THAT ARE NOT CURRENTLY IN OPERATIONAL USE AT YOUR AGENCY.)

Civilian Cabinet-Level Department Subdivisions N=114	(A) CURRENTLY IN OPERATIONAL USE		NO RESPONSE	(B) CURRENTLY PROTOTYPING OR PILOT TESTING		NO RESPONSE
INFORMATION TECHNOLOGIES	YES (1)	NO (2)		YES (1)	NO (2)	
ELECTRONIC COLLECTION/FILING						
1. Computerized telephone calls	21	93		5	88	
2. Electronic mail	57	57		7	50	
3. Electronic data transfer (computer to computer)	68	46		7	39	
4. Magnetic tape/disk	73	41		2	39	
5. Floppy disk	82	31	1	1	30	
NON-PAPER STORAGE						
6. Micrographics (microfilm/microfiche)	61	52	1	2	50	
7. Magnetic tape/disk	75	39		1	38	
8. Floppy disk	85	27	2		27	
9. Videodisk	10	104		2	102	
10. Compact optical disk (Read-only-memory - CD-ROM)	5	109		17	92	
11. Compact optical disk (Interactive - CD-I)		114		7	107	
12. Optical disk (Write-once, read-many - WORM)	1	113		11	102	
13. Optical disk - Erasable		114		3	111	
PRINTING						
14. Computer-aided page make-up	55	57	2	8	49	
15. Computer graphics	73	39	2	7	32	
16. Electronic photocomposition	49	64	1	8	56	
17. Photo-offset printing	59	53	2	1	52	
18. Laser and other non-impact printing	72	41	1	1	40	
19. Microform printing	20	94		3	91	
20. Desktop publishing systems	37	75	2	15	59	1
21. Electronic publishing systems	23	90	1	11	79	

(continued)

APPENDIX VI

Civilian Cabinet-Level Department Subdivisions N=114 INFORMATION TECHNOLOGIES	(A) CURRENTLY IN OPERATIONAL USE		NO RESPONSE	(B) CURRENTLY PROTOTYPING OR PILOT TESTING		NO RESPONSE
	YES (1)	NO (2)		YES (1)	NO (2)	
ELECTRONIC DISSEMINATION						
22. Electronic mail	48	62	4	6	56	
23. Electronic bulletin board	40	73	1	11	62	
24. Electronic data transfer (computer to computer)	56	57	1	7	50	
25. Magnetic tape/disk	65	48	1	2	46	
26. Floppy disk	69	44	1	4	40	
27. Videodisk	10	103	1	1	102	
28. Compact optical disk (Read-only-memory - CD-ROM)	5	108	1	13	95	
29. Compact optical disk (Interactive - CD-I)		113	1	6	107	
30. Selective Dissemination of Information (SDI) systems	5	108	1	4	104	
31. Expert systems	3	110	1	8	102	
32. Digital cartographic systems	7	106	1	1	105	
33. Videotext/teletext	3	111		2	109	
34. One-way cable television	9	105			105	
35. Interactive cable television	3	111		1	110	
36. Broadcast television	18	96			96	
37. Videotape	50	62	2	1	61	
38. Film	34	80		1	79	
39. Teleconferencing	37	77		2	75	
40. Videoconferencing	9	105		5	100	

APPENDIX VI

With respect to the collection, filing, storage, printing, and dissemination of public information, which of the following information technologies is your agency (A) currently using, or (B) currently prototyping or pilot testing? (CHECK ONE BOX FOR EACH ROW UNDER COLUMN (A) "CURRENTLY IN OPERATIONAL USE." ALSO, CHECK ONE BOX FOR EACH ROW UNDER COLUMN (B) "CURRENTLY PROTOTYPING OR PILOT TESTING" FOR THOSE TECHNOLOGIES THAT ARE NOT CURRENTLY IN OPERATIONAL USE AT YOUR AGENCY.)

Department of Defense N=11	(A) CURRENTLY IN OPERATIONAL USE		NO RESPONSE	(B) CURRENTLY PROTOTYPING OR PILOT TESTING		NO RESPONSE
INFORMATION TECHNOLOGIES	YES (1)	NO (2)		YES (1)	NO (2)	
ELECTRONIC COLLECTION/FILING						
1. Computerized telephone calls	5	6			6	
2. Electronic mail	6	5		1	4	
3. Electronic data transfer (computer to computer)	8	3			3	
4. Magnetic tape/disk	9	2			2	
5. Floppy disk	9	2			2	
NON-PAPER STORAGE						
6. Micrographics (microfilm/microfiche)	9	2			2	
7. Magnetic tape/disk	10	1			1	
8. Floppy disk	10	1			1	
9. Videodisk	3	7	1		7	
10. Compact optical disk (Read-only-memory - CD-ROM)	2	9		1	8	
11. Compact optical disk (Interactive - CD-I)	1	10			10	
12. Optical disk (Write-once, read-many - WORM)	3	8			8	
13. Optical disk - Erasable	1	10		2	8	
PRINTING						
14. Computer-aided page make-up	7	4		2	2	
15. Computer graphics	10	1		1		
16. Electronic photocomposition	9	2			2	
17. Photo-offset printing	7	4			4	
18. Laser and other non-impact printing	10	1			1	
19. Microform printing	5	6			6	
20. Desktop publishing systems	4	7		3	4	
21. Electronic publishing systems	2	9		1	8	

(continued)

APPENDIX VI

Department of Defense N=11 INFORMATION TECHNOLOGIES	(A) CURRENTLY IN OPERATIONAL USE		NO RESPONSE	(B) CURRENTLY PROTOTYPING OR PILOT TESTING		NO RESPONSE
	YES (1)	NO (2)		YES (1)	NO (2)	
ELECTRONIC DISSEMINATION						
22. Electronic mail	6	5		1	4	
23. Electronic bulletin board	5	6		2	4	
24. Electronic data transfer (computer to computer)	6	5		1	4	
25. Magnetic tape/disk	8	3			3	
26. Floppy disk	8	3			3	
27. Videodisk	1	10		1	9	
28. Compact optical disk (Read-only-memory - CD-ROM)	1	10			10	
29. Compact optical disk (Interactive - CD-I)		11		1	10	
30. Selective Dissemination of Information (SDI) systems	1	10		1	9	
31. Expert systems	2	9		2	7	
32. Digital cartographic systems	1	10			10	
33. Videotext/teletext	1	10			10	
34. One-way cable television	3	8		1	7	
35. Interactive cable television	1	10			10	
36. Broadcast television	3	8			8	
37. Videotape	7	4			4	
38. Film	4	7			7	
39. Teleconferencing	6	5			5	
40. Videoconferencing	2	9		1	8	

APPENDIX VI

With respect to the collection, filing, storage, printing, and dissemination of public information, which of the following information technologies is your agency (A) currently using, or (B) currently prototyping or pilot testing? (CHECK ONE BOX FOR EACH ROW UNDER COLUMN (A) "CURRENTLY IN OPERATIONAL USE." ALSO, CHECK ONE BOX FOR EACH ROW UNDER COLUMN (B) "CURRENTLY PROTOTYPING OR PILOT TESTING" FOR THOSE TECHNOLOGIES THAT ARE NOT CURRENTLY IN OPERATIONAL USE AT YOUR AGENCY.)

Agencies N=48 INFORMATION TECHNOLOGIES	(A) CURRENTLY IN OPERATIONAL USE		NO RESPONSE	(B) CURRENTLY PROTOTYPING OR PILOT TESTING		NO RESPONSE
	YES (1)	NO (2)		YES (1)	NO (2)	
ELECTRONIC COLLECTION/FILING						
1. Computerized telephone calls	10	38		2	35	1
2. Electronic mail	23	25		3	22	
3. Electronic data transfer (computer to computer)	27	21		3	18	
4. Magnetic tape/disk	30	18			18	
5. Floppy disk	32	16		1	15	
NON-PAPER STORAGE						
6. Micrographics (microfilm/microfiche)	34	14		1	13	
7. Magnetic tape/disk	35	13			13	
8. Floppy disk	35	13			13	
9. Videodisk	3	45		2	43	
10. Compact optical disk (Read-only-memory - CD-ROM)	4	44		5	39	
11. Compact optical disk (Interactive - CD-I)	1	47		1	46	
12. Optical disk (Write-once, read-many - WORM)	2	46		5	41	
13. Optical disk - Erasable	1	47		1	46	
PRINTING						
14. Computer-aided page make-up	25	23		9	13	1
15. Computer graphics	28	20		8	12	
16. Electronic photocomposition	24	24		6	18	
17. Photo-offset printing	30	18			18	
18. Laser and other non-impact printing	39	9		5	4	
19. Microform printing	14	33	1	2	31	
20. Desktop publishing systems	14	33	1	15	18	
21. Electronic publishing systems	15	32	1	6	26	

(continued)

APPENDIX VI

Agencies N=48 INFORMATION TECHNOLOGIES	(A) CURRENTLY IN OPERATIONAL USE		NO RESPONSE	(B) CURRENTLY PROTOTYPING OR PILOT TESTING		NO RESPONSE
	YES (1)	NO (2)		YES (1)	NO (2)	
ELECTRONIC DISSEMINATION						
22. Electronic mail	19	29		4	25	
23. Electronic bulletin board	8	40		11	29	
24. Electronic data transfer (computer to computer)	25	23		3	20	
25. Magnetic tape/disk	29	19		1	18	
26. Floppy disk	28	20		3	17	
27. Videodisk	3	45		1	44	
28. Compact optical disk (Read-only-memory - CD-ROM)	1	47		5	42	
29. Compact optical disk (Interactive - CD-I)		48		1	47	
30. Selective Dissemination of Information (SDI) systems	4	44		1	43	
31. Expert systems	1	47		4	43	
32. Digital cartographic systems	1	47			47	
33. Videotext/teletext	3	45			45	
34. One-way cable television	5	43		1	42	
35. Interactive cable television	1	47			47	
36. Broadcast television	9	39			39	
37. Videotape	25	23		1	22	
38. Film	15	33			33	
39. Teleconferencing	16	32		1	31	
40. Videoconferencing	4	44		3	41	

APPENDIX VI

APPENDIX VII

RESEARCH AND EVALUATION STUDIES OF INFORMATION TECHNOLOGIES

Departments and agencies were asked to check whether or not they had conducted research or evaluation studies for the information technologies listed.

APPENDIX VII

For the following information technologies, has your department or agency conducted research or evaluation studies involving their actual or planned implementation within your agency? (CHECK ONE BOX IN EACH ROW.)

Civilian Cabinet-Level Department Subdivisions N=114	CONDUCTED RESEARCH OR EVALUATION STUDIES		NO RESPONSE
	YES (1)	NO (2)	
ELECTRONIC COLLECTION/FILING			
1. Computerized telephone calls	19	95	
2. Electronic mail	55	59	
3. Electronic data transfer (computer to computer)	62	52	
4. Magnetic tape/disk	52	62	
5. Floppy disk	60	54	
NON-PAPER STORAGE			
6. Micrographics (microfilm/microfiche)	47	67	
7. Magnetic tape/disk	52	62	
8. Floppy disk	59	55	
9. Videodisk	16	98	
10. Compact optical disk (Read-only-memory - CD-ROM)	25	89	
11. Compact optical disk (Interactive - CD-I)	9	105	
12. Optical disk (Write-once, read-many - WORM)	21	93	
13. Optical disk - Erasable	5	109	
PRINTING			
14. Computer-aided page make-up	49	65	
15. Computer graphics	60	54	
16. Electronic photocomposition	33	81	
17. Photo-offset printing	28	85	1
18. Laser and other non-impact printing	62	52	
19. Microform printing	19	95	
20. Desktop publishing systems	53	61	
21. Electronic publishing systems	35	79	

(continued)

APPENDIX VII

Civilian Cabinet-Level Department Subdivisions N=114	CONDUCTED RESEARCH OR EVALUATION STUDIES		
INFORMATION TECHNOLOGIES	YES (1)	NO (2)	NO RESPONSE
ELECTRONIC DISSEMINATION			
22. Electronic mail	51	63	
23. Electronic bulletin board	48	66	
24. Electronic data transfer (computer to computer)	54	60	
25. Magnetic tape/disk	48	66	
26. Floppy disk	55	59	
27. Videodisk	12	102	
28. Compact optical disk (Read-only-memory - CD-ROM)	20	94	
29. Compact optical disk (Interactive - CD-I)	6	108	
30. Selective Dissemination of Information (SDI) systems	8	106	
31. Expert systems	17	97	
32. Digital cartographic systems	9	105	
33. Videotext/teletext	5	109	
34. One-way cable television	-	109	
35. Interactive cable television	3	111	
36. Broadcast television	8	106	
37. Videotape	27	87	
38. Film	15	99	
39. Teleconferencing	28	86	
40. Videoconferencing	15	99	

APPENDIX VII

For the following information technologies, has your department or agency conducted research or evaluation studies involving their actual or planned implementation within your agency? (CHECK ONE BOX IN EACH ROW.)

Department of Defense N=11	CONDUCTED RESEARCH OR EVALUATION STUDIES		NO RESPONSE
	YES (1)	NO (2)	
ELECTRONIC COLLECTION/FILING			
1. Computerized telephone calls	2	9	
2. Electronic mail	8	3	
3. Electronic data transfer (computer to computer)	9	2	
4. Magnetic tape/disk	6	5	
5. Floppy disk	7	4	
NON-PAPER STORAGE			
6. Micrographics (microfilm/microfiche)	8	3	
7. Magnetic tape/disk	7	4	
8. Floppy disk	8	3	
9. Videodisk	3	8	
10. Compact optical disk (Read-only-memory - CD-ROM)	6	5	
11. Compact optical disk (Interactive - CD-I)	5	6	
12. Optical disk (Write-once, read-many - WORM)	7	4	
13. Optical disk - Erasable	5	6	
PRINTING			
14. Computer-aided page make-up	6	5	
15. Computer graphics	7	4	
16. Electronic photocomposition	6	5	
17. Photo-offset printing	5	6	
18. Laser and other non-impact printing	6	5	
19. Microform printing	4	7	
20. Desktop publishing systems	7	4	
21. Electronic publishing systems	6	5	

(continued)

APPENDIX VII

Department of Defense N = 11 INFORMATION TECHNOLOGIES	CONDUCTED RESEARCH OR EVALUATION STUDIES		NO RESPONSE
	YES (1)	NO (2)	
ELECTRONIC DISSEMINATION			
22. Electronic mail	7	4	
23. Electronic bulletin board	6	5	
24. Electronic data transfer (computer to computer)	7	4	
25. Magnetic tape/disk	6	5	
26. Floppy disk	7	4	
27. Videodisk	3	8	
28. Compact optical disk (Read-only-memory - CD-ROM)	4	7	
29. Compact optical disk (Interactive - CD-I)	4	7	
30. Selective Dissemination of Information (SDI) systems	4	7	
31. Expert systems	7	4	
32. Digital cartographic systems	2	9	
33. Videotext/teletext	2	9	
34. One-way cable television	1	10	
35. Interactive cable television		11	
36. Broadcast television	1	10	
37. Videotape	6	5	
38. Film	3	8	
39. Teleconferencing	5	6	
40. Videoconferencing	4	7	

APPENDIX VII

For the following information technologies, has your department or agency conducted research or evaluation studies involving their actual or planned implementation within your agency? (CHECK ONE BOX IN EACH ROW.)

Agencies N=48	CONDUCTED RESEARCH OR EVALUATION STUDIES		NO RESPONSE
	YES (1)	NO (2)	
ELECTRONIC COLLECTION/FILING			
1. Computerized telephone calls	13	35	
2. Electronic mail	27	21	
3. Electronic data transfer (computer to computer)	29	19	
4. Magnetic tape/disk	24	24	
5. Floppy disk	20	28	
NON-PAPER STORAGE			
6. Micrographics (microfilm/microfiche)	26	22	
7. Magnetic tape/disk	25	23	
8. Floppy disk	23	23	
9. Videodisk	3	45	
10. Compact optical disk (Read-only-memory - CD-ROM)	12	36	
11. Compact optical disk (Interactive - CD-I)	6	42	
12. Optical disk (Write-once, read-many - WORM)	8	40	
13. Optical disk - Erasable	4	43	1
PRINTING			
14. Computer-aided page make-up	25	23	
15. Computer graphics	28	20	
16. Electronic photocomposition	22	26	
17. Photo-offset printing	20	28	
18. Laser and other non-impact printing	30	18	
19. Microform printing	13	35	
20. Desktop publishing systems	27	21	
21. Electronic publishing systems	20	28	

(continued)

APPENDIX VII

Agencies N=48 INFORMATION TECHNOLOGIES	CONDUCTED RESEARCH OR EVALUATION STUDIES		NO RESPONSE
	YES (1)	NO (2)	
ELECTRONIC DISSEMINATION			
22. Electronic mail	24	24	
23. Electronic bulletin board	20	28	
24. Electronic data transfer (computer to computer)	25	23	
25. Magnetic tape/disk	25	23	
26. Floppy disk	24	24	
27. Videodisk	4	44	
28. Compact optical disk (Read-only-memory - CD-ROM)	6	42	
29. Compact optical disk (Interactive - CD-I)	4	44	
30. Selective Dissemination of Information (SDI) systems	5	43	
31. Expert systems	5	43	
32. Digital cartographic systems		48	
33. Videotext/teletext	1	47	
34. One-way cable television	3	45	
35. Interactive cable television	3	45	
36. Broadcast television	3	45	
37. Videotape	13	35	
38. Film	5	43	
39. Teleconferencing	10	38	
40. Videoconferencing	5	43	

APPENDIX VII

QUALITY, COST, AND TIMELINESS ASSESSMENTS

We asked departments and agencies to assess three aspects of producing information products--quality, cost, and timeliness--for formats available from their own agency, GPO, the National Technical Information Service of the Department of Commerce, the Consumer Information Center of the General Services Administration, depository libraries, and commercial vendors/contractors. They were asked to use a typical agency report as a base and assess each aspect on a 5-point scale. Quality was defined as "clarity, readability, and layout." Cost was as compared to the costs of similar dissemination services prevailing in the information industry.

The three groups' responses for quality are grouped together, followed by responses for cost and timeliness. Each summary shows the number in each group of respondents that use the service/format and the distribution of those users' responses on the 5-point scale.

APPENDIX VIII

For typical agency reports (i.e., 50-100 pages, typeset, some graphics, specified deadline), how high or low would you rate the quality (i.e., clarity, readability, and layout) of each of the dissemination services and formats listed below? (CHECK ONE BOX IN EACH ROW. IF YOU DO NOT USE A FORMAT FROM A SPECIFIC SERVICE, CHECK BOX 1.)

Civilian Cabinet-Level Department Subdivisions N=114 DISSEMINATION SERVICES/ FORMATS	QUALITY OF THE SERVICE AND FORMAT						
	DO NOT USE THIS SERVICE OR FORMAT (1)	VERY HIGH (2)	HIGH (3)	MODERATE (4)	LOW (5)	VERY LOW (6)	NO RESPONSE
YOUR OWN AGENCY							
1. Paper	9	31	47	26			1
2. Microfiche	92	2	8	7	3	1	1
3. Electronic mail	85	2	13	10	3		1
4. Magnetic tape/disk	68	12	24	8	1		1
5. Floppy disk	76	7	20	9	1		1
GOVERNMENT PRINTING OFFICE							
1. Paper	40	15	41	14	1	1	2
2. Microfiche	104		5	4	1		
3. Electronic mail	113		1				
4. Magnetic tape/disk	112		1		1		
5. Floppy disk	111		1	2			
NATIONAL TECHNICAL INFORMATION SERVICE (NTIS)							
1. Paper	73	5	12	12	10	1	1
2. Microfiche	87		8	15	4		
3. Electronic mail	113		1				
4. Magnetic tape/disk	104		4	5			1
5. Floppy disk	106		5	2			1
CONSUMER INFORMATION CENTER							
1. Paper	94	9	10	1			
2. Microfiche	114						
3. Electronic mail	114						
4. Magnetic tape/disk	114						
5. Floppy disk	114						
DEPOSITORY LIBRARIES							
1. Paper	56	10	23	18		1	6
2. Microfiche	100	2	5	5		1	1
COMMERCIAL VENDORS/CONTRACTORS							
1. Paper	59	12	29	12	1		1
2. Microfiche	105	2	2	4		1	
3. Electronic mail	103	2	4	3		1	1
4. Magnetic tape/disk	96	4	6	7		1	
5. Floppy disk	102	2	4	4	1	1	

APPENDIX VIII

For typical agency reports (i.e., 50-100 pages, typeset, some graphics, specified deadline), how high or low would you rate the quality (i.e., clarity, readability, and layout) of each of the dissemination services and formats listed below? (CHECK ONE BOX IN EACH ROW. IF YOU DO NOT USE A FORMAT FROM A SPECIFIC SERVICE, CHECK BOX 1.)

Department of Defense N=11 DISSEMINATION SERVICES/ FORMATS	QUALITY OF THE SERVICE AND FORMAT						NO RESPONSE
	DO NOT USE THIS SERVICE OR FORMAT (1)	VERY HIGH (2)	HIGH (3)	MODERATE (4)	LOW (5)	VERY LOW (6)	
YOUR OWN AGENCY							
1. Paper		4	6	1			
2. Microfiche	5	1	4	1			
3. Electronic mail	7		3	1			
4. Magnetic tape/disk	4	1	3	3			
5. Floppy disk	4	2	5				
GOVERNMENT PRINTING OFFICE							
1. Paper	2	3	6				
2. Microfiche	7		4				
3. Electronic mail	11						
4. Magnetic tape/disk	10		1				
5. Floppy disk	11						
NATIONAL TECHNICAL INFORMATION SERVICE (NTIS)							
1. Paper	3		4	2	2		
2. Microfiche	8		2		1		
3. Electronic mail	11						
4. Magnetic tape/disk	10			1			
5. Floppy disk	10		1				
CONSUMER INFORMATION CENTER							
1. Paper	10	1					
2. Microfiche	11						
3. Electronic mail	11						
4. Magnetic tape/disk	11						
5. Floppy disk	11						
DEPOSITORY LIBRARIES							
1. Paper	7	1	3				
2. Microfiche	8	1	1	1			
COMMERCIAL VENDORS/CONTRACTORS							
1. Paper	4	4	1	2			
2. Microfiche	8		1	2			
3. Electronic mail	10	1					
4. Magnetic tape/disk	10		1				
5. Floppy disk	10		1				

APPENDIX VIII

For typical agency reports (i.e., 50-100 pages, typeset, some graphics, specified deadline), how high or low would you rate the quality (i.e., clarity, readability, and layout) of each of the dissemination services and formats listed below? (CHECK ONE BOX IN EACH ROW. IF YOU DO NOT USE A FORMAT FROM A SPECIFIC SERVICE, CHECK BOX 1.)

Agencies N=48 DISSEMINATION SERVICES/ FORMATS	QUALITY OF THE SERVICE AND FORMAT DO NOT USE THIS SERVICE OR FORMAT (1)	VERY HIGH (2)	HIGH (3)	MODERATE (4)	LOW (5)	VERY LOW (6)	NO RESPONSE
YOUR OWN AGENCY							
1. Paper		15	25	8			
2. Microfiche	30	1	6	10	1		
3. Electronic mail	35	3	6	3	1		
4. Magnetic tape/disk	29	7	8	3	1		
5. Floppy disk	34	3	10	1			
GOVERNMENT PRINTING OFFICE							
1. Paper	10	12	16	8	1	1	
2. Microfiche	39		2	5	2		
3. Electronic mail	48						
4. Magnetic tape/disk	47		1				
5. Floppy disk	48						
NATIONAL TECHNICAL INFORMATION SERVICE (NTIS)							
1. Paper	32	1	7	5	2	1	
2. Microfiche	38		5	3	1	1	
3. Electronic mail	48						
4. Magnetic tape/disk	45	1	2				
5. Floppy disk	48						
CONSUMER INFORMATION CENTER							
1. Paper	37	4	5	1		1	
2. Microfiche	47			1			
3. Electronic mail	48						
4. Magnetic tape/disk	47	1					
5. Floppy disk	48						
DEPOSITORY LIBRARIES							
1. Paper	19	9	12	6			2
2. Microfiche	35	1	3	7	1		1
COMMERCIAL VENDORS/CONTRACTORS							
1. Paper	19	11	12	6			
2. Microfiche	35	3	7	3			
3. Electronic mail	45	1	2				
4. Magnetic tape/disk	42	3	3				
5. Floppy disk	44	2	1	1			

APPENDIX VIII

For typical agency reports (i.e., 50-100 pages, typeset, some graphics, specified deadline), how high or low would you describe the cost of each of the following dissemination services and formats as compared to the costs of similar dissemination services prevailing in the information industry? (CHECK ONE BOX IN EACH ROW. IF YOU DO NOT USE A FORMAT FROM A SPECIFIC SERVICE, CHECK BOX 1.)

Civilian Cabinet-Level Department Subdivisions
N=114

DISSEMINATION SERVICES/ FORMATS	COST OF THE SERVICE AND FORMAT: DO NOT USE THIS SERVICE OR FORMAT (1)	VERY HIGH (2)	HIGH (3)	MODERATE (4)	LOW (5)	VERY LOW (6)	NO RESPONSE
YOUR OWN AGENCY							
1. Paper	9	2	16	66	14	6	1
2. Microfiche	91		1	16	3	1	2
3. Electronic mail	84		4	18	4	3	1
4. Magnetic tape/disk	67		4	28	10	3	2
5. Floppy disk	75		2	22	9	4	2
GOVERNMENT PRINTING OFFICE							
1. Paper	40	5	17	45	6		1
2. Microfiche	104		2	6	1	1	
3. Electronic mail	113			1			
4. Magnetic tape/disk	112		1				1
5. Floppy disk	111			3			
NATIONAL TECHNICAL INFORMATION SERVICE (NTIS)							
1. Paper	73	9	18	11	1	1	1
2. Microfiche	87	2	6	17	2		
3. Electronic mail	112		1	1			
4. Magnetic tape/disk	103		3	6	1		1
5. Floppy disk	106		2	5			1
CONSUMER INFORMATION CENTER							
1. Paper	94		3	13	1	3	
2. Microfiche	114						
3. Electronic mail	114						
4. Magnetic tape/disk	114						
5. Floppy disk	114						
DEPOSITORY LIBRARIES							
1. Paper	56	1	4	30	6	12	5
2. Microfiche	100			7	2	4	1
COMMERCIAL VENDORS/CONTRACTORS							
1. Paper	59		8	43	3		1
2. Microfiche	105		1	5	1	1	1
3. Electronic mail	103	1		7	2		1
4. Magnetic tape/disk	96	1	4	13			
5. Floppy disk	102	1	1	9	1		

APPENDIX VIII

For typical agency reports (i.e., 50-100 pages, typeset, some graphics, specified deadline), how high or low would you describe the cost of each of the following dissemination services and formats as compared to the costs of similar dissemination services prevailing in the information industry? (CHECK ONE BOX IN EACH ROW. IF YOU DO NOT USE A FORMAT FROM A SPECIFIC SERVICE, CHECK BOX 1.)

Department of Defense
N = 11

DISSSEMINATION SERVICES/ FORMATS	COST OF THE SERVICE AND FORMAT						NO RESPONSE
	DO NOT USE THIS SERVICE OR FORMAT (1)	VERY HIGH (2)	HIGH (3)	MODERATE (4)	LOW (5)	VERY LOW (6)	
YOUR OWN AGENCY							
1. Paper			1	6	3	1	
2. Microfiche	5			5	1		
3. Electronic mail	7		1	2	1		
4. Magnetic tape/disk	4			4	3		
5. Floppy disk	4			6	1		
GOVERNMENT PRINTING OFFICE							
1. Paper	2	2	2	4	1		
2. Microfiche	7	1	2	1			
3. Electronic mail	11						
4. Magnetic tape/disk	10		1				
5. Floppy disk	11						
NATIONAL TECHNICAL INFORMATION SERVICE (NTIS)							
1. Paper	3		1	5	1	1	
2. Microfiche	8			2		1	
3. Electronic mail	11						
4. Magnetic tape/disk	10			1			
5. Floppy disk	10					1	
CONSUMER INFORMATION CENTER							
1. Paper	10					1	
2. Microfiche	11						
3. Electronic mail	11						
4. Magnetic tape/disk	11						
5. Floppy disk	11						
DEPOSITORY LIBRARIES							
1. Paper	2		1	2		1	
2. Microfiche	8		1		1	1	
COMMERCIAL VENDORS/CONTRACTORS							
1. Paper	4	1	2	3		1	
2. Microfiche	8		1	2			
3. Electronic mail	9		1	1			
4. Magnetic tape/disk	9		1	1			
5. Floppy disk	9		1	1			

APPENDIX VIII

For typical agency reports (i.e., 50-100 pages, typeset, some graphics, specified deadline), how high or low would you describe the cost of each of the following dissemination services and formats as compared to the costs of similar dissemination services prevailing in the information industry? (CHECK ONE BOX IN EACH ROW. IF YOU DO NOT USE A FORMAT FROM A SPECIFIC SERVICE, CHECK BOX 1.)

Agencies N=48 DISSEMINATION SERVICES/ FORMATS	COST OF THE SERVICE AND FORMAT						NO RESPONSE
	DO NOT USE THIS SERVICE OR FORMAT (1)	VERY HIGH (2)	HIGH (3)	MODERATE (4)	LOW (5)	VERY LOW (6)	
YOUR OWN AGENCY							
1. Paper			4	30	12	2	
2. Microfiche	31		1	9	6	1	
3. Electronic mail	35		1	8	4		
4. Magnetic tape/disk	31		1	12	4		
5. Floppy disk	35		2	8	3		
GOVERNMENT PRINTING OFFICE							
1. Paper	10	3	13	15	5	2	
2. Microfiche	40			6	1	1	
3. Electronic mail	48						
4. Magnetic tape/disk	48						
5. Floppy disk	48						
NATIONAL TECHNICAL INFORMATION SERVICE (NTIS)							
1. Paper	32	3	6	7			
2. Microfiche	38	1	3	5	1		
3. Electronic mail	48						
4. Magnetic tape/disk	45	1			2		
5. Floppy disk	48						
CONSUMER INFORMATION CENTER							
1. Paper	36		1	4	2	5	
2. Microfiche	47			1			
3. Electronic mail	48						
4. Magnetic tape/disk	48						
5. Floppy disk	48						
DEPOSITORY LIBRARIES							
1. Paper	18		2	13	6	7	2
2. Microfiche	35		2	6		5	
COMMERCIAL VENDORS/CONTRACTORS							
1. Paper	20		4	20	3	1	
2. Microfiche	35	2	1	7	3		
3. Electronic mail	45		1	1	1		
4. Magnetic tape/disk	42		2	3	1		
5. Floppy disk	44		1	2	1		

APPENDIX VIII

For typical agency reports (i.e., 50-100 pages, typeset, some graphics, specified deadline), to what extent, if at all, are the information products from the following dissemination services in the following formats provided in a timely manner to meet the needs of your agency? (CHECK ONE BOX IN EACH ROW. IF YOU DO NOT USE A FORMAT FROM A SPECIFIC SERVICE, CHECK BOX 1.)

Civilian Cabinet-Level Department Subdivisions N=114 DISSEMINATION SERVICES/ FORMATS	TIMELINESS OF THE SERVICE AND FORMAT						NO RESPONSE
	DO NOT USE THIS SERVICE OR FORMAT (1)	VERY GREAT EXTENT (2)	GREAT EXTENT (3)	MODERATE EXTENT (4)	SOME EXTENT (5)	LITTLE OR NO EXTENT (6)	
YOUR OWN AGENCY							
1. Paper	9	29	47	24	3	1	1
2. Microfiche	92	2	10	7	1	1	1
3. Electronic mail	85	10	11	4	3	1	
4. Magnetic tape/disk	68	12	19	9	3	2	1
5. Floppy disk	76	7	17	11	1	2	
GOVERNMENT PRINTING OFFICE							
1. Paper	40	7	23	33	8	2	1
2. Microfiche	104	2	3	5			
3. Electronic mail	113	1					
4. Magnetic tape/disk	112	1				1	
5. Floppy disk	111	1	1	1			
NATIONAL TECHNICAL INFORMATION SERVICE (NTIS)							
1. Paper	73		9	23	4	4	1
2. Microfiche	87		5	17	2	3	
3. Electronic mail	113			1			
4. Magnetic tape/disk	104	1	2	5	1		1
5. Floppy disk	106		3	2	2		1
CONSUMER INFORMATION CENTER							
1. Paper	94	4	7	6	2		1
2. Microfiche	114						
3. Electronic mail	114						
4. Magnetic tape/disk	114						
5. Floppy disk	114						
DEPOSITORY LIBRARIES							
1. Paper	56	8	14	27	2	3	4
2. Microfiche	100	4	2	7			1
COMMERCIAL VENDORS/CONTRACTORS							
1. Paper	59	7	20	22	4	1	1
2. Microfiche	105	1	2	5		1	
3. Electronic mail	103	6	2	2		1	
4. Magnetic tape/disk	96	2	7	7	1	1	
5. Floppy disk	102		4	6	1	1	

APPENDIX VIII

For typical agency reports (i.e., 50-100 pages, typeset, some graphics, specified deadline), to what extent, if at all, are the information products from the following dissemination services in the following formats provided in a timely manner to meet the needs of your agency? (CHECK ONE BOX IN EACH ROW. IF YOU DO NOT USE A FORMAT FROM A SPECIFIC SERVICE, CHECK BOX 1.)

Department of Defense N=11 DISSEMINATION SERVICES/ FORMATS	TIMELINESS OF THE SERVICE AND FORMAT						NO RESPONSE
	DO NOT USE THIS SERVICE OR FORMAT (1)	VERY GREAT EXTENT (2)	GREAT EXTENT (3)	MODERATE EXTENT (4)	SOME EXTENT (5)	LITTLE OR NO EXTENT (6)	
YOUR OWN AGENCY							
1. Paper		4	3	3		1	
2. Microfiche	5	1	4	1			
3. Electronic mail	7	3		1			
4. Magnetic tape/disk	4	3	3	1			
5. Floppy disk	4	3	4				
GOVERNMENT PRINTING OFFICE							
1. Paper	2	2	4	3			
2. Microfiche	7	1	3				
3. Electronic mail	11						
4. Magnetic tape/disk	10		1				
5. Floppy disk	11						
NATIONAL TECHNICAL INFORMATION SERVICE (NTIS)							
1. Paper	2	1	1	4	1	1	
2. Microfiche	8		1	1		1	
3. Electronic mail	11						
4. Magnetic tape/disk	10				1		
5. Floppy disk	10					1	
CONSUMER INFORMATION CENTER							
1. Paper	10			1			
2. Microfiche	11						
3. Electronic mail	11						
4. Magnetic tape/disk	11						
5. Floppy disk	11						
DEPOSITORY LIBRARIES							
1. Paper	7		1	1			
2. Microfiche	8		3				
COMMERCIAL VENDORS/CONTRACTORS							
1. Paper	3		4	3			
2. Microfiche	8		2	1			
3. Electronic mail	9		2				
4. Magnetic tape/disk	9		1	1			
5. Floppy disk	9		1	1			

APPENDIX VIII

For typical agency reports (i.e., 50-100 pages, typeset, some graphics, specified deadline), to what extent, if at all, are the information products from the following dissemination services in the following formats provided in a timely manner to meet the needs of your agency? (CHECK ONE BOX IN EACH ROW. IF YOU DO NOT USE A FORMAT FROM A SPECIFIC SERVICE, CHECK BOX 1.)

Agencies N=48 DISSEMINATION SERVICES/ FORMATS	TIMELINESS OF THE SERVICE AND FORMAT						NO RESPONSE
	DO NOT USE THIS SERVICE OR FORMAT (1)	VERY GREAT EXTENT (2)	GREAT EXTENT (3)	MODERATE EXTENT (4)	SOME EXTENT (5)	LITTLE OR NO EXTENT (6)	
YOUR OWN AGENCY							
1. Paper		22	20	6			
2. Microfiche	31	2	7	8			
3. Electronic mail	35	5	4	3	1		
4. Magnetic tape/disk	30	3	9	5	1		
5. Floppy disk	35	4	7	1	1		
GOVERNMENT PRINTING OFFICE							
1. Paper	10	6	11	16	4	1	
2. Microfiche	40		1	5	2		
3. Electronic mail	48						
4. Magnetic tape/disk	47		1				
5. Floppy disk	48						
NATIONAL TECHNICAL INFORMATION SERVICE (NTIS)							
1. Paper	32		7	6	2	1	
2. Microfiche	38		5	3	2		
3. Electronic mail	48						
4. Magnetic tape/disk	45	1	2				
5. Floppy disk	48						
CONSUMER INFORMATION CENTER							
1. Paper	36	3	4	4		1	
2. Microfiche	47		1				
3. Electronic mail	48						
4. Magnetic tape/disk	48						
5. Floppy disk	48						
DEPOSITORY LIBRARIES							
1. Paper	18	3	9	8	7		3
2. Microfiche	35		3	6	3		1
COMMERCIAL VENDORS/CONTRACTORS							
1. Paper	16	8	13	7	1		
2. Microfiche	35	3	4	6			
3. Electronic mail	45	1	2				
4. Magnetic tape/disk	42	1	3	2			
5. Floppy disk	44	2	2				

ASSESSMENT OF GPO-PROVIDED PRODUCTS OR SERVICES

We also asked departments and agencies to assess GPO-provided products or services on a 5-point scale ranging from "Very Satisfied" through "Very Dissatisfied."

The results for the three groups show the number of respondents in each group that use GPO for a given product or service and, of those, the number that reported they are Very Satisfied, Satisfied, Neither Satisfied Nor Dissatisfied, Dissatisfied, and Very Dissatisfied.

Narrative comments were solicited for the Very Satisfied and Very Dissatisfied responses. They have been furnished to OTA.

APPENDIX IX

How satisfied or dissatisfied are you with GPO's provision of the following information products or services? (CHECK ONE BOX IN EACH ROW. IF YOU DO NOT USE THIS PRODUCT OR SERVICE, CHECK BOX 1.)

Civilian Cabinet-Level Department Subdivisions N=114 GPO PROVIDED INFORMATION PRODUCTS OR SERVICES	DO NOT USE GPO FOR THIS INFORMATION PRODUCT OR SERVICE (1)	VERY SATISFIED (2)	SATISFIED (3)	NEITHER SATISFIED NOR DISSAT-ISFIED (4)	DISSAT-ISFIED (5)	VERY DISSAT-ISFIED (6)	NO RESPONSE
1. Publications layout	64	5	34	6	5		
2. Composition	48	8	45	7	3	2	1
3. Printing - Quality of printed reports	23	11	61	11	5	2	1
4. Printing - Timeliness of printed reports	23	7	53	16	12	2	1
5. Printing - Cost of printed reports	27	5	38	31	9	3	1
6. Binding	32	8	52	16	5		1
7. Cataloging	75	4	23	9	1		2
8. Marketing/ sales	57	8	25	15	7	2	
9. Distribution	47	10	33	14	6	1	3
10. Depository library services	56	7	38	11	1		1

APPENDIX IX

How satisfied or dissatisfied are you with GPO's provision of the following information products or services? (CHECK ONE BOX IN EACH ROW. IF YOU DO NOT USE THIS PRODUCT OR SERVICE, CHECK BOX 1.)

Department of Defense N=11 GPO PROVIDED INFORMATION PRODUCTS OR SERVICES	DO NOT USE GPO FOR THIS INFORMATION PRODUCT OR SERVICE (1)	VERY SATISFIED (2)	SATISFIED (3)	NEITHER SATISFIED NOR DISSATISFIED (4)	DISSATISFIED (5)	VERY DISSATISFIED (6)	NO RESPONSE
1. Publications layout	3	3	4	1			
2. Composition	2	3	5	1			
3. Printing - Quality of printed reports		3	6	2			
4. Printing - Timeliness of printed reports	1		8	1	1		
5. Printing - Cost of printed reports			7	2		2	
6. Binding	1	1	8	1			
7. Cataloging	5	1	5				
8. Marketing/ sales	4	3	4				
9. Distribution	3		7		1		
10. Depository library services	7		4				

APPENDIX IX

How satisfied or dissatisfied are you with GPO's provision of the following information products or services? (CHECK ONE BOX IN EACH ROW. IF YOU DO NOT USE THIS PRODUCT OR SERVICE, CHECK BOX 1.)

Agencies N=48 GPO PROVIDED INFORMATION PRODUCTS OR SERVICES	DO NOT USE GPO FOR THIS INFORMATION PRODUCT OR SERVICE (1)	VERY SATISFIED (2)	SATISFIED (3)	NEITHER SATISFIED NOR DISSATISFIED (4)	DISSATISFIED (5)	VERY DISSATISFIED (6)	NO RESPONSE
1. Publications layout	21	4	17	4	2		
2. Composition	15	6	21	5	1		
3. Printing - Quality of printed reports	4	7	28	5	4		
4. Printing - Timeliness of printed reports	4	6	18	11	8	1	
5. Printing - Cost of printed reports	4	2	14	13	14	1	
6. Binding	5	5	25	11	1	1	
7. Cataloging	31	1	11	5			
8. Marketing/ sales	17	1	15	12	3		
9. Distribution	16	1	14	14	2	1	
10. Depository library services	18	1	17	10	2		

APPENDIX X

RESPONSIBILITIES, POLICIES AND PROCEDURES, AND TECHNOLOGIES

We asked departments and agencies several questions about their statutory responsibilities, their information-related policies and procedures, and their electronic databases and bulletin boards. Here responses for all three groups are displayed on the same page. For this appendix we display, below each entry, the number of those responding that reported values greater than zero.

We also asked departments and agencies to provide copies of the relevant statutes and policies and procedures. These were furnished to OTA.

APPENDIX X

	Civilian Cabinet-level department subdivisions N=114	Department of Defense N=11	Agencies N=48
Does your agency have statutory responsibility to provide free or low-cost public access to its electronic data bases? (Check one)			
1. Yes, to provide free access	1	1	
2. Yes, to provide low-cost access (i.e., less than full cost of dissemination)	1		
3. Yes, either to provide free or low-cost access depending on the user or data base	6		4
4. No	106	10	44
Whether or not your agency has statutory responsibility to provide free or low-cost public access to its electronic data bases, does it have documented policies or procedures to provide free or low-cost public access to these electronic data bases? (Check one)			
1. Yes, to provide free access		2	
2. Yes, to provide low-cost access (i.e., less than full cost of dissemination)	1		2
3. Yes, either to provide free or low-cost access depending on the user or data base	10		3
4. No	103	9	43
Does your agency currently have documented policies or procedures which act to govern the electronic dissemination of electronic information by agency contractors? (Check one)			
1. Yes	9		3
2. No	49	4	20
3. Do not use contractors to disseminate public information	56	7	25

APPENDIX X

	Civilian Cabinet-level department subdivisions N=114	Department of Defense N=11	Agencies N=48
Does your agency have documented policies or procedures on the role of the private commercial sector in the development and marketing of your public information products and services? (Check one)			
Development			
1. Yes	6	1	7
2. No	44	4	21
3. Do not use commercial sector	63	6	20
No response	1		
Marketing			
1. Yes	5	1	5
2. No	40	4	23
3. Do not use commercial sector	68	6	20
No response	1		
Does your agency have documented policies or procedures on the applicability of the Freedom of Information Act to public information in electronic formats? (Check one)			
1. Yes	21	5	12
2. No	93	5	36
No response		1	
Does your agency have documented policies or procedures on the role of libraries (either federal, academic, special or public) as a channel for disseminating government information to the public? (Check one)			
1. Yes	13	2	6
2. No	101	8	42
No response		1	

APPENDIX X

	Civilian Cabinet-level department subdivisions N=114	Department of Defense N=11	Agencies N=48
How many electronic data bases containing public information does your agency maintain? (If none, enter zero.)	849 N=48	18,218 N=7	390 N=20
How many of these electronic data bases are available to the public from your agency, contractors, and/or commercial vendors? (If none, enter zero.)			
1. Your agency	505 N=34	18,100 N=3	367 N=13
2. Contractors	10 N=7	360 N=1	3 N=3
3. Commercial vendors	101 N=13	180 N=1	7 N=4
How many agency electronic bulletin boards containing public information does your agency maintain? (If none, enter zero.)	25 N=15	133 N=4	9 N=4
How many of these agency electronic bulletin boards are available to the public from your agency, contractors, and/or commercial vendors? (If none, enter zero.)			
1. Your agency	10 N=7	110 N=2	9 N=4
2. Contractors	5 N=5		
3. Commercial vendors	2 N=1		

APPENDIX XI

BUDGETS/EXPENDITURES AND INFORMATION PRODUCTS

We asked departments and agencies to provide their total budgets and their expenditure levels for certain activities for fiscal years 1983 through 1986 and estimates for 1987 and 1988. They were also asked to provide information on the quantities of a variety of information products for fiscal years 1983 through 1987. For this appendix we display, below each entry, the number of those responding who reported amounts greater than zero. Information provided in this appendix should be used very cautiously since the totals may significantly understate, and could overstate, department and agency budgets, expenditures, and quantities of information products.

Our cover letter to senior IRM officials stressed that best estimates were adequate for the purposes of this survey. Nevertheless, in many cases no estimates were provided initially and in some cases none could be obtained through follow-up attempts. During our follow-up attempts, some department and agency contacts said that (1) their budgeting and accounting systems could not provide the data aggregated as we asked for it; (2) they believed some definitions were not specific enough to ensure that their response was what we were seeking; and (3) information was not available, particularly for the earlier years.

BUDGETS/EXPENDITURES FOR FISCAL YEARS 1983 THROUGH 1988

Please provide your agency's total budget. Then provide expenditure levels (i.e., total aggregated costs including personnel costs, administration costs, materials costs, etc.) for the following activities for fiscal years 1983 through 1986 and provide estimates for fiscal years 1987 and 1988. (ENTER AMOUNTS IN THOUSANDS OF DOLLARS. IF NONE, ENTER ZERO "0".)

ACTIVITIES	BUDGET/EXPENDITURE FOR FISCAL YEARS... (IN THOUSANDS OF DOLLARS)					
Civilian Cabinet-Level Department Subdivisions N=114	1983	1984	1985	1986	1987 (EST)	1988 (EST)
1. TOTAL AGENCY BUDGET	$81,755,086. N = 102	$174,246,955. N = 103	$195,343,534. N = 106	$184,134,515. N = 107	$186,162,248. N = 110	$200,339,188. N = 106
2. Research, development, and pilot testing for:						
a. Optical disk systems for information storage, retrieval & dissemination	$2,381. N = 3	$8,579. N = 3	$16,324. N = 5	$24,857. N = 6	$35,079. N = 10	$48,817. N = 11
b. Electronic publishing systems	$166. N = 2	$417. N = 3	$808. N = 3	$1,286. N = 8	$2,213. N = 11	$14,904. N = 15
c. Artificial intelligence/ expert systems for information retrieval and dissemination	$16. N = 1	$71. N = 1	$312. N = 3	$413. N = 4	$553. N = 7	$654. N = 7
3. Printing and publishing	$369,655. N = 95	$390,324. N = 100	$413,016. N = 103	$408,971. N = 103	$459,516. N = 106	$464,724. N = 101
4. Agency Library Operations:						
In-house	$43,402. N = 27	$47,956. N = 27	$49,229. N = 27	$48,374. N = 29	$52,011. N = 28	$55,794. N = 28
Contract	$5,982. N = 10	$9,557. N = 20	$9,843. N = 22	$10,431. N = 23	$12,876. N = 23	$13,660. N = 23
5. Agency information clearinghouse operations:						
In-house	$11,552. N = 17	$12,738. N = 18	$13,240. N = 18	$12,267. N = 18	$12,907. N = 18	$13,056. N = 18
Contract	$1,441,368. N = 8	$1,139,663. N = 9	$1,090,111. N = 11	$537,283. N = 12	$1,653,840. N = 12	$881,604. N = 12

(continued)

APPENDIX XI

INFORMATION PRODUCTS

Please provide the following information concerning the information products listed below for fiscal years 1983 through 1986 and provide an estimate for fiscal year 1987. (IF NONE, ENTER ZERO "0".)

PRODUCTS Civilian Cabinet-Level Department Subdivisions N=114	FISCAL YEARS 1983	1984	1985	1986	1987 (EST)
1. PUBLICATIONS PRINTED					
a. Number of titles	60,234 N = 81	61,032 N = 84	58,755 N = 84	53,425 N = 91	54,442 N = 93
b. Number of pages	3,188,156 N = 77	3,137,050 N = 81	3,097,624 N = 81	3,604,287 N = 87	3,709,580 N = 89
2. PRINTED PUBLICATIONS ACCEPTED INTO GPO'S SALES PROGRAM					
a. Number of titles	3,610 N = 41	3,947 N = 48	3,521 N = 47	2,678 N = 50	2,774 N = 50
b. Number of pages	444,279 N = 44	441,206 N = 46	422,718 N = 47	358,093 N = 48	376,866 N = 48
3. PRINTED PUBLICATIONS INCLUDED IN FEDERAL DEPOSITORY LIBRARY PROGRAM					
a. Number of titles	38,026 N = 41	38,860 N = 44	37,017 N = 44	35,240 N = 44	36,243 N = 44
b. Number of pages	7,140,252 N = 41	7,147,178 N = 41	7,601,806 N = 41	6,876,121 N = 41	7,224,803 N = 41
4. INFORMATION PRODUCTS DISSEMINATED ELECTRONICALLY					
a. Number of titles	1,361 N = 16	1,961 N = 17	5,178 N = 23	5,769 N = 26	6,261 N = 26

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BUDGETS/EXPENDITURES FOR FISCAL YEARS 1983 THROUGH 1988

Please provide your agency's total budget. Then provide expenditure levels (i.e., total aggregated costs including personnel costs, administration costs, materials costs, etc.) for the following activities for fiscal years 1983 through 1986 and provide estimates for fiscal years 1987 and 1988. (ENTER AMOUNTS IN THOUSANDS OF DOLLARS. IF NONE, ENTER ZERO "0".)

ACTIVITIES	BUDGET/EXPENDITURE FOR FISCAL YEARS... (IN THOUSANDS OF DOLLARS)					
Department of Defense N=11	1983	1984	1985	1986	1987 (EST)	1988 (EST)
1. TOTAL AGENCY BUDGET	$171,920,503. N = 10	$180,347,022. N = 10	$202,780,054. N = 10	$201,608,881 N = 10	$203,977,495 N = 10	$216,617,092 N = 10
2. Research, development, and pilot testing for:						
a. Optical disk systems for information storage, retrieval & dissemination	$ 500. N = 1	$ 500. N = 1	$ 500. N = 1	$ 1,000. N = 1	$ 1,500. N = 1	$ 1,500. N = 1
b. Electronic publishing systems	$ 100. N = 1	$ 100. N = 1	$ 100. N = 1	$ 500. N = 1	$ 520. N = 2	$ 510. N = 2
c. Artificial intelligence/ expert systems for information retrieval and dissemination	$ 620. N = 1	$ 1,100. N =1	$ 1,400. N = 1	$ 2,200 N = 1	$ 2,600. N = 1	$ 2,605. N = 2
3. Printing and publishing	$ 433,834. N = 10	$ 467,946. N = 10	$ 627,039. N = 10	$ 466,486. N = 10	$ 504,869. N = 10	$ 509,208. N = 10
4. Agency library Operations:						
In-house	$ 79,022. N = 5	$ 79,735. N = 5	$ 81,182. N = 5	$ 93,516. N = 6	$ 96,588. N = 6	$ 101,785. N = 6
Contract	$ 1,101. N = 2	$ 1,179. N = 2	$ 1,410. N = 2	$ 1,745. N = 3	$ 1,828. N = 3	$ 1,717. N = 3
5. Agency information clearinghouse operations:						
In-house	$ 50. N = 1	$ 50. N = 1	$ 200. N = 2	$ 236. N = 2	$ 241. N = 2	$ 246. N = 2
Contract	$ 0.	$ 0.	$ 0.	$ 0.	$ 0.	$ 0.

(continued)

INFORMATION PRODUCTS

Please provide the following information concerning the information products listed below for fiscal years 1983 through 1986 and provide an estimate for fiscal year 1987. (IF NONE, ENTER ZERO "0".)

PRODUCTS Department of Defense N=11	FISCAL YEARS 1983	1984	1985	1986	1987 (EST)
1. PUBLICATIONS PRINTED					
a. Number of titles	339,324 N = 8	340,168 N = 8	326,616 N = 9	326,079 N = 9	334,057 N = 9
b. Number of pages	93,444,848 N = 7	93,568,408 N = 7	90,261,365 N = 8	90,285,757 N = 8	92,929,461 N = 8
2. PRINTED PUBLICATIONS ACCEPTED INTO GPO'S SALES PROGRAM					
a. Number of titles	323 N = 5	313 N = 6	288 N = 5	293 N = 6	295 N = 6
b. Number of pages	79,595 N =4	77,394 N = 5	70,316 N = 4	70,962 N = 5	71,586 N = 5
3. PRINTED PUBLICATIONS INCLUDED IN FEDERAL DEPOSITORY LIBRARY PROGRAM					
a. Number of titles	762 N = 5	704 N = 5	845 N = 4	716 N = 4	776 N = 4
b. Number of pages	111,124 N = 5	97,880 N = 5	132,598 N = 4	100,848 N = 4	110,540 N = 4
4. INFORMATION PRODUCTS DISSEMINATED ELECTRONICALLY					
a. Number of titles	104 N = 3	154 N = 3	205 N = 3	282 N = 3	307 N = 3

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BUDGETS/EXPENDITURES FOR FISCAL YEARS 1983 THROUGH 1988

Please provide your agency's total budget. Then provide expenditure levels (i.e., total aggregated costs including personnel costs, administration costs, materials costs, etc.) for the following activities for fiscal years 1983 through 1986 and provide estimates for fiscal years 1987 and 1988. (ENTER AMOUNTS IN THOUSANDS OF DOLLARS. IF NONE, ENTER ZERO "0".)

ACTIVITIES	BUDGET/EXPENDITURE FOR FISCAL YEARS... (IN THOUSANDS OF DOLLARS)					
Agencies N=48	1983	1984	1985	1986	1987 (EST)	1988 (EST)
1. TOTAL AGENCY BUDGET	$39,616,821. N = 47	$42,014,757. N = 47	$44,345,236. N = 47	$42,862,657. N = 47	$45,239,783. N = 47	$47,660,098. N = 47
2. Research, development, and pilot testing for:						
a. Optical disk systems for information storage, retrieval & dissemination	$1,010. N = 1	$2,709. N = 2	$7,874. N = 2	$9,512. N = 5	$8,041. N = 7	$23,085. N = 7
b. Electronic publishing systems	$0.	$0.	$80. N = 1	$86. N = 3	$219. N = 6	$534. N = 6
c. Artificial intelligence/ expert systems for information retrieval and dissemination	$0.	$0.	$0.	$12. N = 1	$24. N = 2	$62. N = 2
3. Printing and publishing	$69,543. N = 45	$76,061. N = 46	$74,590. N = 46	$74,348. N = 46	$103,630. N = 46	$110,699. N = 47
4. Agency Library Operations:						
In-house	$113,444. N = 31	$116,974. N = 34	$88,696. N = 34	$97,181. N = 36	$104,280. N = 37	$92,127. N = 36
Contract	$2,790. N = 10	$3,474. N = 13	$4,726. N = 15	$4,213. N = 17	$4,849. N = 16	$10,020. N = 17
5. Agency information clearinghouse operations:						
In-house	$1,798. N = 8	$1,839. N = 8	$1,908. N = 8	$1,588. N = 8	$1,758. N = 8	$1,811. N = 8
Contract	$5,467. N = 6	$8,828. N = 6	$5,916. N = 6	$8,882. N = 6	$6,606. N = 6	$5,357. N = 6

(continued)

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INFORMATION PRODUCTS

Please provide the following information concerning the information products listed below for fiscal years 1983 through 1986 and provide an estimate for fiscal year 1987. (IF NONE, ENTER ZERO "0".)

PRODUCTS	FISCAL YEARS				
Agencies N=48	1983	1984	1985	1986	1987 (EST)
1. PUBLICATIONS PRINTED					
a. Number of titles	28,600 N = 43	28,817 N = 43	22,235 N = 44	21,492 N = 44	20,458 N = 44
b. Number of pages	627,367 N = 39	514,033 N = 39	563,087 N = 40	529,138 N = 41	545,579 N = 41
2. PRINTED PUBLICATIONS ACCEPTED INTO GPO'S SALES PROGRAM					
a. Number of titles	1,172 N = 26	889 N = 28	911 N = 26	917 N = 25	897 N = 28
b. Number of pages	181,587 N = 25	176,636 N = 27	116,730 N = 24	97,302 N = 24	105,194 N = 27
3. PRINTED PUBLICATIONS INCLUDED IN FEDERAL DEPOSITORY LIBRARY PROGRAM					
a. Number of titles	2,703 N = 24	2,631 N = 24	2,586 N = 24	3,397 N = 25	3,590 N = 25
b. Number of pages	266,629 N = 23	252,559 N = 23	253,397 N = 23	235,771 N = 24	259,339 N = 24
4. INFORMATION PRODUCTS DISSEMINATED ELECTRONICALLY					
a. Number of titles	1,001 N = 2	1,506 N = 3	1,511 N = 3	1,514 N = 4	1,521 N = 5

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GLOSSARY

Access to Information - The process by which users obtain public information: accessibility implies that the information is identified and made known to the public, and that the information can be obtained in a convenient format, in understandable language, and in a time frame whereby the information is current and has utility.

Artificial Intelligence - See Expert Systems

Compact Optical Disk - A digital optical disk, encoded, sized, and mastered according to standards in use for consumer digital audio systems. There are two basic types of compact disks:
(1) CD-ROM - Read-only-memory
(2) CD-I - Interactive

Composition - The arrangement of type for printing; or the production of type or typographic characters arranged for printing.

Computer-Aided Page Makeup - The use of computers to automate the formation of text and graphics into discrete pages.

Computer Graphics - The use of computers to generate, manipulate, and display pictorial images.

Computerized Telephone Calls - Telephones using an automatic calling unit (auto dialer) which permits automatic dialing of calls via the telephone network.

Desktop Publishing - Basic composition of camera-ready copy by end users rather than professional photocompositors.

Dissemination - See Information Dissemination

Electronic Bulletin Board - A computerized message system that generally can be used to post messages or read those left by others. Computer users gain access by means of a modem and common telephone communication lines.

Electronic Collection or Dissemination of Information - Information collected from or disseminated to the public through electronic media (e.g., magnetic tape, floppy disk, CD-ROM, on-line computer based systems, telecommunications, etc.).

Electronic Data Base - A store of data on continuously updated files which can be made accessable to a computer.

Electronic Data Transfer - The transfer of data signals between interconnected computers or terminal devices.

Electronic Mail - A computerized message system that can be used to send and receive messages in electronic form via remote computer terminals.

(continued)

APPENDIX XII

Electronic Photocomposition	- The preparation of copy for printing by using a computer to generate digitized characters which are photographically recorded on light sensitive paper or film.
Electronic Publishing	- Electronic storage, retrieval, and transmission of digitized text and graphics which allows (1) on-demand printing of publications or portions of publications, and (2) printing at remote, decentralized locations.
Expert Systems	- A particular development of artificial intelligence. It combines the computer's ability to store specialized knowledge with its ability to mimic the reasoning process of a human expert (e.g., in interrogating patients for medical diagnosis).
Government Publication	- A publication, document, form, microform or other similar matter which is reproduced by printing or other means for a government agency and for the official use of a government entity.
Information	- The content or symbolic substance of a communication, i.e., knowledge or intelligence, such as facts, data, or opinions, including numerical, graphic or narrative forms, regardless of mode or medium by which it is maintained or communicated.
Information Dissemination	- Distributing information to the public in whatever medium or format it may be available, without the necessity for the users to seek access for each such distribution.
Information Product	- A discrete package of information, developed prior to specific needs for it (except, perhaps the first need), usually with expectation of providing it to a number of users without modification.
Information Resources	- Both the information itself, and the related resources and facilities (e.g., personnel, equipment, funds, and technology) for accessing and processing the information.
Information Service	- Means for storing, accessing, processing, or delivering information to meet the needs of specific users when they request it.
Interactive Cable TV	- A system in which television signals are generally carried one-way directly from the distributing office to the subscriber's receiving set via coaxial cable. Interactive cable is a two way link allowing the subscriber to respond to signals along the cable. These signals can be fed into a computer, providing a wide range of new information services.
Laser Printing	- A form of electrographic printing whereby digital information is fed to a laser which creates a dot-matrix image, either directly on photo-sensitive paper, or indirectly on a photo-recepter device which transfers the image onto paper.
Microform Printing	- More appropriately referred to as computer output microform (COM). Instead of producing paper output, COM systems reduce the same information to microform or microfilm.
Micrographics	- The technique of photographically reducing document pages to microform (microfilm or microfiche).

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APPENDIX XII

Non-impact Printing	- Includes laser, ink-jet, and deposition printing. (See also Laser Printing)
Off-Line Electronic Media	- Storage media not under control of a computer's central processor, (e.g., magnetic tape, floppy disk, cassette, videodisk, optical disk, etc.).
On-Line Electronic Media	- Storage media under continual control of a computer, or connected to a computer by a communications link and accessible via a terminal
Optical Disk	- A non-contact, random access plastic disk tracked by optical laser beams, used for mass storage and retrieval of digitized text and graphics. Two heavily used types are: (1) WORM - Write-once, read-many (2) ERASABLE (See also Compact Optical Disk)
Printing-On-Demand Systems	- See Electronic Publishing
Private Sector	- Includes private enterprise, for profit, and non-profit, as well as professional and trade associations, joint government/private enterprises, and privately supported organizations such as libraries and universities.
Public Information	- That portion of government information that is not personal, proprietary, classified, or otherwise subject to Freedom of Information Act exemptions.
Publication	- See Government Publication
Publications Layout	- The plan, design, or arrangement of matter to be reproduced by various printing or reproduction methods.
Telecommunications	- The preparation, transmission, communication or related processing of information by electrical, electromagnetic, electromechanical, or electro-optical means.
Teleconferencing	- Generally any conferencing system employing telecommunications links.
Selective Dissemination of Information (SDI)	- A general term for providing a current awareness service based on a bibliographic database. The subscriber's subject interest "profile" is periodically matched against the updated database. Records matching the subscribers' interests are printed and sent to them.
Videoconferencing	- A form of teleconferencing where participants see as well as hear other participants at remote locations.
Videodisk	- A transparent or reflective disk developed to record or playback television signals, but having the capacity to store and randomly access enormous amounts of digital data. There are two types: (1) capacitance electronic disks in which a stylus rides on the disk, and (2) optical encoded disks which use a laser beam to detect coded signals.

APPENDIX XIII

DEPARTMENTS AND AGENCIES REPRESENTED BY QUESTIONNAIRE RESPONDENTS

Department	Number of Responses
Department of Agriculture	21
Department of Commerce	11
Department of Defense	11
Department of Education	13
Department of Energy	1
Department of Health and Human Services	5
Department of Housing and Urban Development	9
Department of the Interior	10
Department of Justice	7
Department of Labor	5
Department of State	15
Department of Transportation	6
Department of the Treasury	11
Agency (One response per agency)	
ACTION	
Agency for International Development	
Commission on Civil Rights	
Congressional Budget Office	
Consumer Product Safety Commission	
Environmental Protection Agency	

APPENDIX XIII

Agency (continued)

Equal Employment Opportunity Commission

Export-Import Bank of the United States

Farm Credit Administration

Federal Communications Commission

Federal Deposit Insurance Corporation

Federal Election Commission

Federal Emergency Management Agency

Federal Energy Regulatory Commission

Federal Labor Relations Authority

Federal Maritime Commission

Federal Mediation and Conciliation Service

Federal Reserve Board

Federal Trade Commission

Foreign Claims Settlement Commission

General Accounting Office

General Services Administration

Interstate Commerce Commission

Library of Congress

Merit Systems Protection Board

National Archives and Records Administration

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Agency (continued)

National Commission on Libraries and Information Science

National Credit Union Administration

National Endowment for the Arts

National Endowment for the Humanities

National Labor Relations Board

National Mediation Board

National Science Foundation

National Transportation Safety Board

Nuclear Regulatory Commission

Office of Management and Budget

Office of Personnel Management

Office of Technology Assessment

Peace Corps

Pension Benefit Guaranty Corporation

Railroad Retirement Board

Securities and Exchange Commission

Selective Service System

Small Business Administration

United States Arms Control and Disarmament Agency

United States Information Agency

APPENDIX XIII

Agency (continued)

United States International Trade Commission

Veterans Administration

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